

What is claimed is:

1. A mobile telephone with remote-controlling capability which remote-controls target equipment by transmitting to the target equipment a desired code in various remote control codes for 5 predetermined various controlling operations on the target equipment, comprising:
  - an operation unit having a plurality of operation buttons;
  - storage means for storing the various remote control codes associated with the plurality of operation buttons in a one-to-one 10 relationship; and
  - transmission means for transmitting to the target equipment a remote control code, which is associated with one button of the plurality of operation buttons, and is one of the various remote control codes stored in said storage means when the one 15 button is pressed.
2. The mobile telephone with remote-controlling capability according to claim 1, further comprising:
  - display means for displaying correspondences between the plurality of operation buttons and the predetermined various 20 controlling operations performed when the plurality of operation buttons are pressed respectively.
3. The mobile telephone with remote-controlling capability according to claim 2, wherein:
  - said display means displays the correspondences by 25 displaying an image of the operation unit showing controlling

operations on and corresponding to the plurality of operation buttons.

4. The mobile telephone with remote-controlling capability according to claim 1, further comprising

5 download means for downloading the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship from a server, which is connected to a communications network, and has the various remote control codes associated with the plurality of operation buttons in a 10 one-to-one relationship, through the communications network, and storing the various remote control codes in said storage means.

5. A remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment by transmitting to the target equipment a desired code 15 in various remote control codes for predetermined various controlling operations on the target equipment, and has an operation unit and storage means for storing the various remote control codes associated with a plurality of operation buttons 20 of the operation unit in a one-to-one relationship, comprising:

25 a transmitting step of transmitting to the target equipment a remote control code, which is associated with one button of the plurality of operation buttons, and is one of the various remote control codes stored in the storage means, when the one button is pressed.

6. The remote-controlling method according to claim 5, further comprising

a displaying step of displaying correspondences between the plurality of operation buttons and the predetermined various 5 controlling operations performed when the plurality of operation buttons are pressed respectively.

7. The remote-controlling method according to claim 6, wherein

said displaying step displays the correspondences by displaying an image of the operation unit showing controlling 10 operations on and corresponding to the plurality of operation buttons.

8. The remote-controlling method according to claim 5, further comprising

a downloading step of downloading the various remote control 15 codes associated with the plurality of operation buttons in a one-to-one relationship from a server, which is connected to a communications network, and has the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship, through the communications network, 20 and storing the various remote control codes in said storage means.

9. A program used to direct a computer to execute a remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target 25 equipment by transmitting to the target equipment a desired code

- in various remote control codes for predetermined various controlling operations on the target equipment, and has an operation unit and storage means for storing the various remote control codes associated with a plurality of operation buttons
- 5       of the operation unit in a one-to-one relationship, comprising:
- a transmitting step of transmitting to the target equipment a remote control code, which is associated with one button of the plurality of operation buttons, and is one of the various remote control codes stored in the storage means, when the one
- 10      button is pressed.
10.     The program according to claim 9, further comprising a displaying step of displaying correspondences between the plurality of operation buttons and the predetermined various controlling operations performed when the plurality of operation
- 15      buttons are pressed respectively.
11.     The program according to claim 10, wherein said displaying step displays the correspondences by displaying an image of the operation unit showing controlling operations on and corresponding to the plurality of operation
- 20      buttons.
12.     The program according to claim 9, further comprising a downloading step of downloading the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship from a server, which is connected to
- 25      a communications network, and has the various remote control

codes associated with the plurality of operation buttons in a one-to-one relationship, through the communications network, and storing the various remote control codes in said storage means.

5    13. A remote control system, comprising:

    a mobile telephone with remote-controlling capability which has an operation unit provided with a plurality of operation buttons and remote-controls target equipment; and

10    and associates various remote control codes for predetermined various controlling operations on the target equipment with the plurality of operation buttons in a one-to-one relationship and holds the codes, wherein:

    said mobile telephone comprises:

15    storage means;

    download means for downloading the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship from said server through the communications network, and storing the codes in said storage 20 means; and

    transmission means for transmitting to the target equipment a remote control code, which is associated with one button of the plurality of operation buttons and is one of the various remote control codes stored in said storage means when 25 the one button is pressed.

14. The remote control system according to claim 13, wherein

said mobile telephone comprises display means for displaying correspondences between the plurality of operation buttons and the predetermined various controlling operations performed when the plurality of operation buttons are pressed respectively.

15. The remote control system according to claim 14, wherein said display means displays the correspondences by displaying an image of the operation unit showing controlling operations on and corresponding to the plurality of operation buttons.

16. A mobile telephone with remote-controlling capability which remote-controls target equipment, comprising:

storage means for storing a group of remote control codes for a predetermined controlling operation to be performed on the target equipment; and

transmission means for transmitting to the target equipment the group of remote control codes for the predetermined controlling operation to be performed on the target equipment in response to a user operation.

20 17. The mobile telephone with remote-controlling capability according to claim 16, wherein

the target equipment is a video recording device, and the group of remote control codes forms recording information for recording of a program.

18. The mobile telephone with remote-controlling capability according to claim 16, further comprising

download means for downloading the group of remote control codes from a server, which is connected to a communications network

5 and holds the group of remote control codes, through the communications network, and storing the group of remote control codes in said storage means.

19. A mobile telephone with remote-controlling capability which remote-controls target equipment, comprising:

10 an operation unit having a plurality of operation buttons; storage means for storing various remote control codes associated with the plurality of operation buttons in a one-to-one relationship for various controlling operations on the target equipment, and a part of remote control codes of a group of remote control codes for a predetermined controlling operation on the target equipment; and

transmission means for transmitting to the target equipment the group of remote control codes formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes to perform the predetermined controlling operation on the target equipment in response to a user operation.

20. The mobile telephone with remote-controlling capability according to claim 19, wherein

25 the group of remote control codes forms time setting information for setting a time on the target equipment.

21. The mobile telephone with remote-controlling capability according to claim 19, further comprising

download means for downloading the various remote control codes and the part of remote control codes from a server, which  
5 is connected to a communications network and holds the various remote control codes and the part of remote control codes, through the communications network, and storing the various remote control codes and the part of remote control codes in said storage means.

10 22. A mobile telephone with remote-controlling capability which remote-controls target equipment, comprising:

an operation unit having a plurality of operation buttons;  
storage means for storing various remote control codes associated with the plurality of operation buttons in a one-to-one  
15 relationship for various controlling operations on the target equipment, a first group of remote control codes for a predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for a predetermined second controlling  
20 operation on the target equipment; and

transmission means for transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode,  
25 transmitting to the target equipment the first group of remote control codes in response to a user operation when the mobile

telephone is set in a second remote control mode, and transmitting to the target equipment the second group of remote control codes formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control  
5 codes in response to a user operation when the mobile telephone is set in a third remote control mode.

23. The mobile telephone with remote-controlling capability according to claim 22, wherein

the target equipment is a video recording device, and the  
10 first group of remote control codes forms recording information for recording of a program.

24. The mobile telephone with remote-controlling capability according to claim 22, wherein

the second group of remote control codes forms time setting  
15 information for setting a time on the target equipment.

25. The mobile telephone with remote-controlling capability according to claim 22, wherein

each remote control code stored in said storage means is received from a server connected to a communications network  
20 through the communications network.

26. A remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and has storage means for storing a group of remote

control codes for a predetermined controlling operation on the target equipment, comprising

a transmitting step of transmitting to the target equipment the group of remote control codes stored in the storage means  
5 in response to a user operation.

27. The remote-controlling method according to claim 26,  
wherein

the target equipment is a video recording device, and the group of remote control codes forms recording information for  
10 recording of a program.

28. The remote-controlling method according to claim 26,  
further comprising

a step of downloading the group of remote control codes from a server, which is connected to a communications network  
15 and holds the group of remote control codes, through the communications network, and storing the group of remote control codes in said storage means.

29. A remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and has an operation unit and storage means for storing  
20 various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship for various controlling operations on the target equipment, and a part of remote control codes of a group of remote

control codes for a predetermined controlling operation on the target equipment, comprising

a step of transmitting to the target equipment the group of remote control codes formed by the part of remote control  
5 codes stored in the storage means and a remote control code associated with an operation button pressed by a user in advance to perform the predetermined controlling operation on the target equipment in response to a user operation.

30. The remote-controlling method according to claim 29,

10 wherein

the group of remote control codes forms time setting information for setting a time on the target equipment.

31. The remote-controlling method according to claim 29,

further comprising

15 a step of downloading the various remote control codes and the part of remote control codes from a server, which is connected to a communications network and holds the various remote control codes and the part of remote control codes, through the communications network, and storing the various remote control  
20 codes and the part of remote control codes in the storage means.

32. A remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and has an operation unit and storage means for storing various remote control codes associated with a plurality of  
25 operation buttons of the operation unit in a one-to-one

relationship for various controlling operations on the target equipment, a first group of remote control codes for a predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for a predetermined second controlling operation on the target equipment, comprising the steps of:

5       transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone  
10      is set in a first remote control mode;

      transmitting to the target equipment the first group of remote control codes in response to a user operation when the mobile telephone is set in a second remote control mode; and

15      transmitting to the target equipment the second group of remote control codes formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes in response to a user operation when the mobile telephone is set in a third remote control mode.

33. The remote-controlling method according to claim 32,  
20      wherein

      the target equipment is a video recording device, and the first group of remote control codes forms recording information for recording of a program.

34. The remote-controlling method according to claim 32,  
25      wherein

the second group of remote control codes forms time setting information for setting a time on the target equipment.

35. The remote-controlling method according to claim 32, wherein

5 each remote control code stored in said storage means is received from a server connected to a communications network through the communications network.

36. A program used to direct a computer to execute a remote-controlling method for a mobile telephone with  
10 remote-controlling capability which remote-controls target equipment, and has storage means for storing a group of remote control codes for a predetermined controlling operation on the target equipment, comprising

a transmitting step of transmitting to the target equipment  
15 the group of remote control codes stored in the storage means in response to a user operation.

37. A program used to direct a computer to execute a remote-controlling method for a mobile telephone with  
remote-controlling capability which remote-controls target  
20 equipment, and has an operation unit and storage means for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship for various controlling operations on the target equipment, and a part of remote control codes of a group of remote

control codes for a predetermined controlling operation on the target equipment, comprising

a step of transmitting to the target equipment the group of remote control codes formed by the part of remote control  
5 codes stored in the storage means and a remote control code associated with an operation button pressed by a user in advance to perform the predetermined controlling operation on the target equipment in response to a user operation.

38. A program used to direct a computer to execute a  
10 remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and has an operation unit and storage means for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one  
15 relationship for various controlling operations on the target equipment, a first group of remote control codes for a predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for a predetermined second controlling  
20 operation on the target equipment, comprising the steps of:

transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode;

25 transmitting to the target equipment the first group of remote control codes in response to a user operation when the mobile telephone is set in a second remote control mode; and

transmitting to the target equipment the second group of remote control codes formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes in response to a user operation  
5 when the mobile telephone is set in a third remote control mode.

39. A remote control system, comprising:

a mobile telephone with remote-controlling capability which has an operation unit provided with a plurality of operation buttons, and remote-controls target equipment; and

10 a server which is connected to a communications network, and stores various remote control codes associated with the plurality of operation buttons in a one-to-one relationship for various controlling operations on the target equipment, a first group of remote control codes for a predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for a predetermined second controlling operation on the target equipment, wherein  
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said mobile telephone comprises:

storage means;

download means for downloading the various remote control codes, the first group of remote control codes, and the part of remote control codes from said server through the communications network, and storing the downloaded codes in said  
25 storage means; and

transmission means for transmitting to the target equipment a remote control code associated with one button of

the plurality of operation buttons when the one button is pressed  
and when the mobile telephone is set in a first remote control  
mode, transmitting to the target equipment the first group of  
remote control codes in response to a user operation when the  
5 mobile telephone is set in a second remote control mode, and  
transmitting to the target equipment the second group of remote  
control codes formed by a remote control code associated with  
an operation button pressed by a user in advance and the part  
of remote control codes in response to a user operation when  
10 the mobile telephone is set in a third remote control mode.